

## Fire Rated Low Loss RA N Male to RA N Male Cable TCOM-195-FR Coax With Times Microwave Components

### FMCA100143

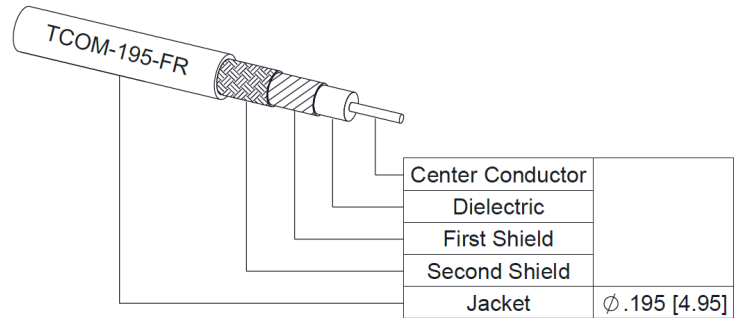


#### Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Male Right Angle
- Cable Type: TCOM-195-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- 80% Phase Velocity
- Triple Shielded
- PE Jacket
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use

#### Description

The RA type N male to RA type N male cable using TCOM-195-FR coax, part number FMCA100143, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-195-FR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100143 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interfaces on the TCOM-195-FR cable allow for easier connections in tight spaces. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.16 [23.49]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.42 [11.22]		Ohms/1000ft [Ohms/Km]
Jacket Spark			3,000	Vrms

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100143	Custom Lengths Available	Insertion Loss (Typ.)	0.036	0.073	0.106	0.172	0.271	dB/ft	
			0.12	0.24	0.35	0.57	0.89	dB/m	
FMCA100143-12	12 inch	Insertion Loss (Typ.)	0.44	0.48	0.51	0.58	0.68	dB	0.221
FMCA100143-24	24 inch	Insertion Loss (Typ.)	0.48	0.55	0.62	0.75	0.95	dB	0.256
FMCA100143-36	36 inch	Insertion Loss (Typ.)	0.51	0.62	0.72	0.92	1.22	dB	0.291
FMCA100143-48	48 inch	Insertion Loss (Typ.)	0.55	0.7	0.83	1.09	1.49	dB	0.326
FMCA100143-60	60 inch	Insertion Loss (Typ.)	0.58	0.77	0.93	1.26	1.76	dB	0.361

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.2 dB  
 Loss due to Connector 2: 0.2 dB  
 Base Weight: 0.221 pounds  
 Additional Weight per Inch: 0.00291 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.221 lbs [100.24 g]

#### Cable

Cable Type TCOM-195-FR  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PE (F)  
 Number of Shields 3  
 Shield Layer 1 Silver Plated Copper Braid  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material PE, Black  
 Jacket Diameter 0.195 in [4.95 mm]  
 One Time Minimum Bend Radius 0.5 in [12.7 mm]  
 Repeated Minimum Bend Radius 2 in [50.8 mm]  
 Bending Moment 0.2 lbs-ft [0.27 N-m]  
 Flat Plate Crush 15 lbs/in [0.27 Kg/mm]

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### Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80µ in. minimum	80µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80µ in. minimum	80µ in. minimum
Hex Size	30	30

### Environmental Specifications

Operating Range Temperature -40 to +155 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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### FMCA100143

#### Typical Performance Data

#### How to Order

Part Number Configuration: **FMCA100143**    **- xx**    **uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: FMCA100143-12 = 12 inches long cable  
FMCA100143-100cm = 100 cm long cable

Fire Rated Low Loss RA N Male to RA N Male Cable TCOM-195-FR Coax With Times Microwave Components from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Fire Rated Low Loss RA N Male to RA N Male Cable TCOM-195-FR Coax With Times Microwave Components FMCA100143](#)

URL: <https://www.fairviewmicrowave.com/fire-rated-low-loss-ra-n-male-to-ra-n-male-cable-tcom-195-fr-coax-with-times-microwave-components-fmca100143-p.aspx>

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